I claim:

1. A circuit arrangement for detecting the state of at least one electrical switch comprising:
   a) in each case a set input and a sensor output, each of which is assigned to a respective electrical switch,
   b) wherein the respective switch can connect the sensor output to a first potential via a first current path when a signal with the value logic "1" is present at the set input and can connect the sensor output via a second current path to a second potential when a signal with the value logic "0" is present at the set input, and
   c) wherein a wake-up signal is generated at a wake-up signal output if a current which is greater than a predetermined threshold current is detected in the first or second current path.

2. The circuit arrangement according to claim 1, wherein for each of the at least one electrical switches, a push-pull output stage is provided whose input of which is connected directly or indirectly to the set input and whose output is connected directly or indirectly to the sensor output, wherein the output of the push-pull output stage is connected to the first potential if a signal with the value logic "1" is present at the set input and to the second potential if a signal with the value logic "0" is present at the set input .

3. The circuit arrangement according to claim 2, wherein a resistor is provided in each case in a first and second current path, the voltage drop of said resistor being used in each case to generate the wake-up signal in the event of a current flow.

4. The circuit arrangement according to claim 1, wherein the resistors each lie in current paths commonly used for a plurality of push-pull output stages.

5. The circuit arrangement according to claim 1, wherein the at least one sensor output for use with a 2-pole electrical switch, the other switch contact of which is connected to the first or second potential, is connected via a resistor to the respective other potential preferably via an additional controllable switch.

6. A microcontroller circuit arrangement comprising:

- a circuit arrangement for detecting the state of at least one electrical switch comprising:
  a) in each case a set input and a sensor output, each of which is assigned to a respective electrical switch,
  b) wherein the respective switch can connect the sensor output to a first potential via a first current path when a signal with the value logic "1" is present at the set input and can connect the sensor output via a second current path to a second potential when a signal with the value logic "0" is present at the set input, and
  c) wherein a wake-up signal is generated at a wake-up signal output if a current which is greater than a predetermined threshold current is detected in the first or second current path,
- wherein a digital control output of the microcontroller is connected in each case to a set input of the state-detection circuit arrangement,
- wherein the wake-up signal output of the circuit arrangement is connected to the wake-up signal input of the microcontroller, and
- wherein the microcontroller determines the switch setting or the change to the switch setting of the at least one switch from the states of the digital control outputs and the state of the wake-up signal, and if necessary triggers dependent actions as required as a function of the switch setting or the change to the switch setting.

7. The microcontroller circuit arrangement according to claim 6, wherein after receiving a wake-up signal, the microcontroller sets the states of one or more digital control outputs such that no wake-up signal is supplied to it by the state-detection circuit arrangement.

8. The microcontroller circuit arrangement according to claim 7, wherein the microcontroller determines the switch setting or the change to the switch setting of the at least one switch solely from the states of the digital control outputs.

9. The microcontroller circuit arrangement according to claim 7, wherein the microcontroller has a hardware counter unit or a counter unit simulated by software, wherein the counter outputs are connected to the set inputs of the state-detection circuit arrangement, and wherein the counting process of the counter unit is started by the active wake-up signal supplied to the counter unit and stopped by the inactive wake-up signal supplied to the counter unit.

10. A method for detecting the state of at least one electrical switch comprising the steps of:

a) providing a set input and a sensor output for each electrical switch,

b) connecting the sensor output to a first potential via a first current path when a signal with the value logic "1" is present at the set input, or

c) connecting the sensor output via a second current path to a second potential when a signal with the value logic "0" is present at the set input, and

d) generating a wake-up signal at a wake-up signal output if a current which is greater than a predetermined threshold current is detected in the first or second current path.

11. The method according to claim 10, wherein steps b) and/or c) comprise the steps of:

connecting the input of a push-pull output stage directly or indirectly to the set input and connecting the output of the push-pull output stage directly or indirectly to the sensor output, wherein the output of the push-pull output stage is connected to the first potential if a signal with the value logic "1" is present at the set input and to the second potential if a signal with the value logic "0" is present at the set input .

12. The method according to claim 11, further comprising the step of providing a resistor in each case in a first and second current path, the voltage drop of said resistor being used in each case to generate the wake-up signal in the event of a current flow.

13. The method according to claim 12, wherein the resistors each lie in current paths commonly used for a plurality of push-pull output stages.

14. The method according to claim 10, further comprising the step of connecting the at least one sensor output for use with a 2-pole electrical switch, the other switch contact of which is connected to the first or second potential, via a resistor to the respective other potential.

15. The method according to claim 14, wherein the step of connecting the at least one sensor output is performed via an additional controllable switch.